

SARA Title III Sections 311 & 312 Emergency & Hazardous Chemical Inventory Reporting General Requirements

Sections 311 and 312 of Title III of the Superfund Amendments & Reauthorization Act of 1986 ("SARA Title III"), [40 CFR 370](#), address emergency and hazardous chemical inventory reporting. These reporting requirements apply to any facility that must maintain a material safety data sheet (MSDS) in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, [29 CFR 1910.1200](#). Over 6000 facilities in Michigan submit hazardous chemical inventories to the Michigan SARA Title III Program, Local Emergency Planning Committees (LEPCs), and local fire departments. These inventories provide valuable information regarding chemical release hazard potential to the first responders.

The Michigan SARA Title III Program accepts all reports on behalf of the State Emergency Response Commission (SERC).

Section 311 requires the initial report of hazardous chemicals at the facility, and section 312 requires the annual hazardous chemical inventory report. If a facility is subject to one if these sections, it is also subject to the other section. The criteria for chemicals to be included in the section 311 report are the same as the criteria for including chemicals in the section 312 report.

In April of 2007, Michigan began using an online reporting program called Tier II Manager™. The online database was pre-loaded with facilities that were reporting to the Michigan SARA Title III Program. All Tier Two reports received from 2001 to 2005 were imported into the online database. Information from the most recent report was used to populate the editable database.

Who Must Submit the Hazardous Chemical Inventory Report?

The owner or operator of a facility that is required under OSHA regulations to prepare or have available an MSDS for a hazardous chemical present at the facility is subject to hazardous chemical inventory reporting under SARA Title III sections 311 and 312. The reports are required if the facility has a **hazardous chemical** that meets or exceeds the **threshold**.

If your facility is not covered by OSHA, there is no reporting required. HOWEVER, in the interest of emergency preparedness, you are urged to consider reporting all hazardous substances that meet the reporting threshold requirements.

Federal agencies were directed by Executive Order No. 12856, signed by President Clinton on August 3, 1993, to comply with all provisions of SARA Title III and the Pollution Prevention Act (PPA).

What Chemicals Are Included?

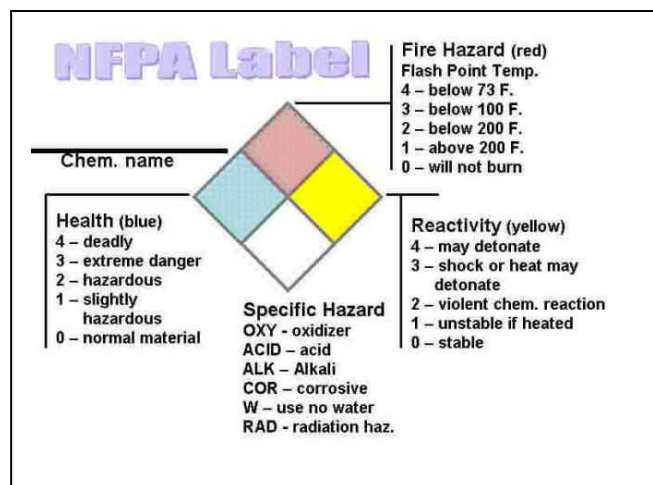
Hazardous chemicals are those chemicals or substances stored or used in the work place for which OSHA requires employers to maintain an MSDS. Over 500,000 products have MSDSs required by OSHA. They are referred to here as "OSHA hazardous chemicals." There is *no list*

of these OSHA hazardous chemicals. The OSHA hazardous chemicals must have an associated physical and/or health hazard as defined in the OSHA Hazard Communication Standard, 29 CFR 1910 section 1200.

Physical and Health Hazards

The physical and health hazards will be described on the MSDS. Many non-hazardous substances also have MSDSs. Check your MSDS to see if it has associated physical and/or health hazards. If a substance is not hazardous according to the OSHA definition, the MSDS

should state that there are “no known hazards.” If the MSDS does not clearly describe the hazards, contact the manufacturer or importer of the substance for clarification. It is their responsibility to determine the hazards in accordance with OSHA standards and provide that information in the MSDS. Use the National Fire Protection Association (NFPA) numeric hazard rating and the hazard category description below to help you determine whether or not an MSDS is describing a hazardous substance.



Hazard Categories and Descriptions for Reporting Under Sections 311 and 312 These hazards are described in detail in the OSHA Hazard Communication Standard 29 CFR 1910 section 1200	
<i>Fire</i>	Flammable, combustible liquid, pyrophoric, and oxidizer. Flammable liquids have a flash point below 100 °F (37.8 °C). Flammable solids are solids that are liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns vigorously and persistently. Combustible liquids have a flash point at or above 100 °F (37.8 °C) and below 200 °F (93.3 °C). A pyrophoric material can spontaneously ignite in air. An oxidizer initiates or promotes combustion in other materials.
<i>Sudden release of pressure</i>	Explosive, and compressed gas
<i>Reactive</i>	Unstable reactive, organic peroxide, and water reactive
<i>Immediate (acute)</i>	Highly toxic, toxic, irritant, sensitizer, corrosive, and other hazardous chemicals that cause an adverse effect to a target organ and which effect usually occurs rapidly as a result of short term exposure and is of short duration
<i>Delayed (chronic)</i>	Carcinogens and other hazardous chemicals that cause an adverse effect to a target organ and which effect generally occurs as a result of long term exposure and is of long duration

Reporting Thresholds

Sections 311 and 312 of SARA Title III require that owners or operators of facilities submit initial and annual reports of the OSHA hazardous chemicals if they meet or exceed certain **thresholds**. The thresholds refer to the total amount of chemical on site, in storage and in process, at any one given time.

The minimum thresholds for reporting are:

- Extremely hazardous substance (EHS) = **500 pounds** or the **threshold planning quantity** (TPQ), whichever is less. The amount of an EHS at a facility (both pure EHSs and EHSs in mixtures) must be aggregated for purposes of threshold determination. Include EHSs in mixtures if they make up at least 1% of the mixture, or 0.1% if the EHS is a carcinogen.
- Gasoline at retail gas stations if all gasoline is stored in compliant underground storage tanks = **75,000 gallons**.
- Diesel fuel at retail gas stations if all diesel fuel is stored in compliant underground storage tanks = **100,000 gallons**.
- All other OSHA hazardous chemicals (except as stated in the next bullet) = **10,000 pounds**.
- The threshold for reporting in response to a request from the SERC, LEPC, or local fire department = **zero**. Regardless of the amount of chemical on site, you must submit a report if you are asked to do so by one of these agencies.

The thresholds for most substances are in pounds. What if your substance is a liquid and you only know the number of gallons? You will need to convert gallons to pounds by using this formula:

$\text{Specific gravity of product} \times 8.34 \text{ lb/gal (weight of water)} = \text{weight of product in lb/gal}$
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The specific gravity (also called the relative density) can be found in the “Physical & Chemical Properties” section of the MSDS. It is a unit-less number that tells how much the substance weighs relative to the weight of water. If the specific gravity is 1, the substance weighs the same as water. If it is less than 1, then the substance weighs less than water. The specific gravity is often reported as a range. Use the highest value in the calculation.

What Chemicals Are Excluded?

Section 311(e) of SARA Title III excludes the following substances from the hazardous chemical inventory reporting requirements in sections 311 and 312:

- Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.
- Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use.

- Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public.
- Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual.
- Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer.

Hazardous waste that is covered by the Resource Conservation and Recovery Act (RCRA) is not regulated by OSHA and is therefore exempt. HOWEVER, in the interest of emergency preparedness, you are urged to consider reporting any hazardous wastes that meet the reporting threshold requirements.

Initial Report of Hazardous Chemicals

Section 311 requires the submittal of an initial report of OSHA hazardous chemicals that are on site in amounts equal to or greater than the thresholds listed above to the SERC, LEPC, and local fire department. This report must be submitted within 3 months after the chemical threshold is first exceeded.

If a substance is already included on the Tier Two annual report, an initial report is not required. Only file initial reports for new substances that exceed the threshold and are not already included in the Tier Two report of hazardous chemicals.

The initial report consists of either copies of the MSDSs or a list of the OSHA hazardous chemicals. If you submit a list, then the list must include the chemical or common name of each substance, any hazardous ingredients in the substances, and the applicable hazard categories. The online reporting program requires that you identify the chemical and the applicable physical and/or health hazards. It also allows you to attach an MSDS for the substance.

Annual (Tier Two) Report of Hazardous Chemicals

The purpose of the Tier Two report required under section 312 is to provide state and local officials and the public with specific information on hazardous chemicals that were present at your facility during the past year. *Michigan does not support the Tier One form for submittal of the hazardous chemical inventory. If you submit a Tier One report, you will be asked by the SERC, LEPC, or local fire department to submit a Tier Two report instead. You will have 30 days in which to submit the requested report to all agencies.*

Michigan began using an online reporting program, Tier II Manager™, in 2007 so that the data would be more readily available to planners (LEPCs) and responders (fire departments). The online program allows facilities to manage their own data and enter updates at any time during the year. The Tier Two report is a snap-shot of the data that is certified annually as being true, accurate, and complete.

Online submittal information is available from the Michigan SARA Title III Program or on the Internet at www.michigan.gov/deqsara, click on the SARA Title III Hazardous Chemical Inventory link.

All facilities can submit the Tier Two report online in Tier II Manager™ to the State. This submittal will also be available online to the LEPCs and fire departments of facilities in participating counties, so additional submittals are therefore not required for these facilities. The report can be submitted to LEPCs and fire departments in non-participating counties in paper form printed from the Tier II Manager™ program.

Where to submit the Initial and Annual reports

The reports required under sections 311 and 312 must be submitted to ALL of the following agencies:

1. The Michigan SARA Title III Program – online in Tier II Manager™.
2. Your [LEPC](#) – online or in hard copy.
3. The fire department with jurisdiction over your facility – online or in hard copy.

Due Dates

The Initial report required under section 311 is due within 3 months after the chemical threshold is exceeded. Reporting as soon as the chemical exceeds the threshold is encouraged.

Tier Two information must be submitted annually by **March 1**. You must report hazardous chemicals that were present at your facility at any time during the previous calendar year at levels that equaled or exceeded the thresholds. You cannot submit your report before the end of the calendar year for which you are reporting.